

## PATENT COOPERATION TREATY

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## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference<br>PCT2003-002   | <b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) |  |
| International application No.<br><b>PCT/KR2003/000586</b>  | International filing date (day/month/year)<br><b>25 MARCH 2003 (25.03.2003)</b>   | Priority date (day/month/year)<br>26 MARCH 2002 (26.03.2002) |
| International Patent Classification (IPC) or national classification and IPC<br><br><b>IPC7 A63B 71/14, A63B 69/00</b> |   |  |
| Applicant<br><br><b>CHO, Young-Kook</b>  |   |  |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

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|--|--|
| Date of submission of the demand<br><br>15 OCTOBER 2003 (15.10.2003)   | Date of completion of this report<br><br>23 JULY 2004 (23.07.2004)   |
| Name and mailing address of the IPEA/KR<br> Korean Intellectual Property Office<br>920 Dunsan-dong, Seo-gu, Daejeon 302-701,<br>Republic of Korea<br>Facsimile No. 82-42-472-7140 | Authorized officer<br><br>KIM, Kwang Oh<br><br>Telephone No. 82-42-481-5452<br> |

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/KR2003/000586

## I. Basis of the report

### 1. With regard to the elements of the international application:\*

- ☒ the international application as originally filed
- ☐ the description:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the claims:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, as amended (together with any statement) under Article 19  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the drawings:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

### 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language English which is

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☒ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

### 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

### 4. The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheet \_\_\_\_\_

### 5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed." and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item I and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION

International application No.

PCT/KR2003/000586

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

|                               |              |     |
|-------------------------------|--------------|-----|
| Novelty (N)                   | Claims 1 - 4 | YES |
|                               | Claims       | NO  |
| Inventive step (IS)           | Claims 1 - 4 | YES |
|                               | Claims       | NO  |
| Industrial applicability (IA) | Claims 1 - 4 | YES |
|                               | Claims       | NO  |

### 2. Citations and explanations (Rule 70.7)

Reference is made to the following documents:

D1: KR 1999-80366  
D2: JP 10-174733  
D3: US 5,466,192  
D4: US 4,666,158

#### I. Novelty

The subject-matter of claims 1-4 is novel over the available prior art (PCT Article 33(2)).

#### II. Inventive step

D1 discloses an apparatus for supporting the wrist comprising: front and rear guide plates with cushion materials adhered to the reverse sides; a plurality of grooves semi-circularly arranged on the front guide plate and each gradation corresponding to the grooves; a circular central plate on the front guide plate that includes one or two grooves where a bearing fastened spring connected to the grooves of the front guide plate is fitted in to be inter-locked gradually from side to side to adjust angles between the front guide plate and the central plate; and a vertical angle adjusting gage installed on a circular convex part formed at the central top of the central plate and a butterfly bolt that is placed on the gage and coupled with a nut having a snap ring passing through the front guide, the central plate and the gage.

D2 discloses a wrist regulating implement comprising: an intermediate body attached to a substrate abutted on the upper face part of a front arm by a spindle to be freely turnable in a left-right direction; a suppressing body, which is abutted on the upper face part of the back of the hand and a finger part in a back and forth direction, and which is attached to the intermediate body by an attaching axis to be turnable; a locking body, which is abutted on a receiving member of the intermediate body and maintaining the suppressing body at a prescribed angle, and which is provided on the base part side of the suppressing body; an adjusting means adjusting the rotating angle of the suppressing body; a receiving member transforming an abutting position with the suppressing body; and a transforming means selectively abutting and non-abutting with the suppressing body.

(Continued on Supplemental Sheet.)

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

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## Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of:

BOX V. 2.

D3 discloses a moveable bowling wrist support device that prevents the hand from adjustably limiting the breaking backward motion while still allowing for free unlimited motion in a forward direction, comprising: a substantially planar hand back up portion element P1 having a means for attaching it to a back of a hand of a user; a substantially planar arm portion element P3 having a means for attaching it to the back of a wrist in a location of a direction of the arm of a user; a substantially planar element P2 having a wing type structure and having a means for attaching P1 to P3; a first means for movably connecting P2 to P3, for movement about a perpendicular axis on the same plane wherein P2 is pivotally connected on top of a front end part which is located within the wrist area such that they can pivot indefinitely sideways with respect to each other and a second means for pivotally connecting P1 to P2 about a coplanar axis having P3 on the same plane of P2 such that P1 can pivot indefinitely in a forward and backward motion with respect to each other; said second means having a stopping mechanism P4 connected permanently on top of P2 with an adjusting means for adjustably limiting the breaking backward motion of P1 while still allowing for free unlimited motion in a forward direction; said second means having a stopping mechanism P4 comprising an adjustable screw, a guiding rod and a stopping lock wherein if the adjustable screw is turned, the stopping lock moves and is guided by the guiding rod; said second means having a stopping mechanism P4 that has a stopping lock that serves as an impact or stopping point of P1 as it moves on a backward motion in a direction of the stopping mechanism; and said second means having a stopping mechanism P4 which has a guiding rod that prevents the stopping lock from turning when the adjustable screw is turned.

D4 discloses a release positioner for both supporting and positioning the hand of a bowler comprising; a hand unit having means for securing the said unit to the bowler's hand; a rigid connector passing over the back of the bowler's wrist for joining the arm unit and the hand unit; a pivot means acting between the arm unit and the connector for angularly positioning the arm unit within a primary plane that is substantially perpendicular to the plane described by the back of the bowler's hand; and locking means for releasably securing the jaw members of the arm unit at a desired position within said primary plane.

Claims 1-4 meet the criteria set out in PCT Article 33(3), because the prior art does not teach or fairly suggest any of the embodiments as specifically set forth in the claims.

### III. Industrial applicability

Claims 1-4 meet the criteria set out in PCT Article 33(4), because all the claims are considered to be industrially applicable.